BPA Basics: Preparing Work Group Participants to Complete Business Process Analysis

Work Group Facilitator's Guide

Public Health
INFORMATICS
Institute

December 2005

Table of Contents

Overview

The Need for Training

Successful completion of the Business Requirements Methodology requires the active participation of several parties:

- Sponsorship and Management Team for client organization(s)
- Work Group (AKA Subject matter experts): A blend of 5-10 experienced, knowledgeable people with collective program and IT knowledge
- Institute Project Manager
- Institute Communication Manager
- Institute Business Analyst

Each of these groups must have a different level of knowledge and skill to work through the process. Therefore, there are a series of training programs to address their needs. This program is the second in the series, and it is designed to address the skill and knowledge needs of the Work Group.

This workshop will prepare Work Groups to complete the first phase in the Methodology, Business Process Analysis.

About the Target Population

The group of people that the business analyst facilitates is known as the "Work Group" or "subject matter experts." In order to be successful, the group should comprise a blend of 5-10 experienced, knowledgeable people with collective public health program and IT knowledge. Together, they must have enough knowledge of their organizations to correctly identify current processes and task flows, identify requirements and user needs for screen schematics and navigation, and (possibly) create the Warnier diagrams used in logical design.

It is assumed that the participants have not been involved in a project exactly like this one, so they may not be familiar with the philosophy, content, process, tools, or products involved.

When to Train: The Work Group should complete this workshop immediately prior to beginning the work of Business Process Analysis.

Workshop Goal

Describe a methodology to analyze business processes for information systems that support their work.

Workshop Objectives

To build toward this goal, the following instructional objectives will be addressed.

By the end of training, participants will be able to:

1. Describe at a detailed-level the theory, principles, steps, and activities of Business Process Analysis.

Program Sequence

The basic sequence of the training will be as follows:

Key Concepts and Tools for Business Process Analysis:

- Introduction
- Review of *Orientation Workshop*
- Group Process (optional)
- Context Analysis (Entity Diagrams)
- Task Flow Diagrams (Functional Flow Diagrams)
- Summary

Workshop Facilitator

This workshop should be facilitated by the business analyst who will be facilitating the process. Facilitating the workshop requires a solid background and knowledge in facilitating the Business Requirements Methodology as well as great facilitation skills.

Program Preparation

Preparation is critical to a successful training session. Listed below are some tips that will help you prepare for your session.

1. Gather all the required materials listed in the "Program Materials" list on page 7.

2. Ensure the workshop participants have the prework materials.

3. Identify a date, time, and location for this training. Prepare a handout with this information and send it to the participants.

4. Go through the entire Work Group Facilitator's Guide.
   - Prepare an agenda. (You may also want to mark key times with Post-Its put in your guide.)
   - Use margins to note key points you plan to emphasize.
   - Walk through all activities.
   - Prepare any flipcharts.
   - Make sure your materials are organized according to when you will need them.
   - Make any adjustments that are needed to the activities, room layout, audio-visuals, etc., based on the number of participants.

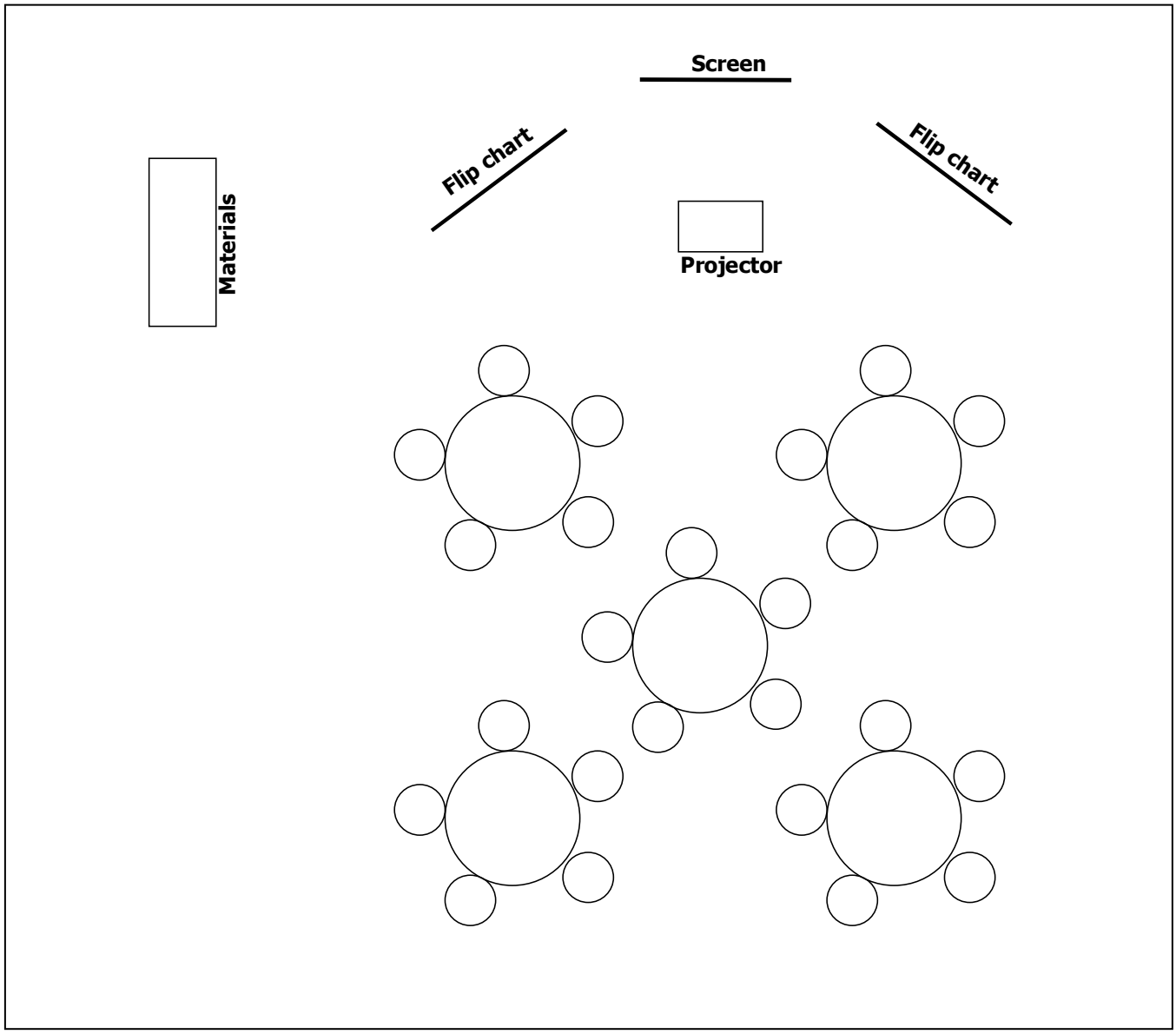
5. Check your training site:
   - Size of room and space to work in small groups
   - Audio visual equipment
     - Projection system
     - Two flipcharts with pads
   - Table and chairs: One table for leader (in front), one for materials, enough tables for participants
   - Wall space for your posters and flipcharts
   - Plans for refreshments as desired/needed.
   - Review the graphic of the ideal site setup on page 6.
   - Set up your training room the night before the training.
   - Test all equipment and make sure you have all of your materials organized for efficient distribution.

Prework

When you send out the prework, you should send out the assignment (page 8 of this handout) and include the following readings:

- *Prework 1: Introduction to Context Analysis*
- *Prework 2: Introduction to Task Flow Diagrams*

Recommended Training Setup



Program Materials

Facilitator' Kit contents:

- Facilitator's Guide
- Complete set of slide transparencies (PowerPoint)
- PowerPoint Handouts (for participants)
- Participant's Guide (one per participant and one per leader)
- Prework materials:
  - *Prework 1: Introduction to Context Analysis*
  - *Prework 2: Introduction to Task Flow Diagrams*

Other materials needed:

- Name tags
- Easel chart stand and paper
- Flipchart markers in a variety of colors
- Masking tape to post flipcharts
- Note pads and pens for participants
- Highlighter markers, one per participant
- Handout: Schedule for Business Process Analysis (project-specific information)
- One stack of Post-it Notes (4 by 6) for each participant

Equipment:

- Computer and LCD projector for PowerPoint slides

Workshop Pre-work

Directions: Please plan about two hours to complete this prework. Bring your products to class, as they will be used during workshop exercises.

Step 1: Read the self study, *Pre-work 1: Introduction to Context Analysis*. If you have any questions, write them in the space below step 5.

Step 2: Based on the information from the self study, choose a process with which you are very familiar. Create a context diagram of this process.

Step 3: Read the self study, *Pre-work 1: Introduction to Task Flow Diagrams*. If you have any questions, write them in the space below step 5.

Step 4: Based on the information from the self-study, convert your context analysis to an *overall* task flow diagram. Then, take one of the entities/transactions and create a detailed task flow diagram of the processes within that entity.

Step 5: In the space below, write any questions you have about context analysis, task flow analysis, or Business Process Analysis in general.

Agenda

This workshop includes approximately 3.5 hours of instructional time.

Key Concepts and Tools for Business Process Analysis.....3 hours, 35 minutes

- Introduction (15 min.)
- Review of Orientation Workshop (50 min.)
- Group Process (20 min.)
- Context Analysis (60 min.)
- Task Flow Diagrams (60 min.)
- Summary (10 min.)

Please note that the above times do not include breaks or lunch.

Key Concepts and Tools for Business Process Analysis

Time 3 hours, 30 minutes

Objective

- Describe a methodology to analyze business processes for information systems that support their work.

Activities

- Introduction (15 min.)
- Review of Orientation Workshop (50 min.)
- Group Process (20 min.) not included in this presentation
- Context Analysis (60 min.)
- Task Flow Diagrams (60 min.)
- Summary (10 min.)

Materials

- Computer and LCD projector
- Transparencies or PowerPoint presentation
- Participant's Guide
- Flipchart and flipchart markers
- Institute Methodology poster (same as one used in orientation workshop)
- Highlighter markers, one per participant
- One stack of Post-it Notes (4 by 6) for each participant

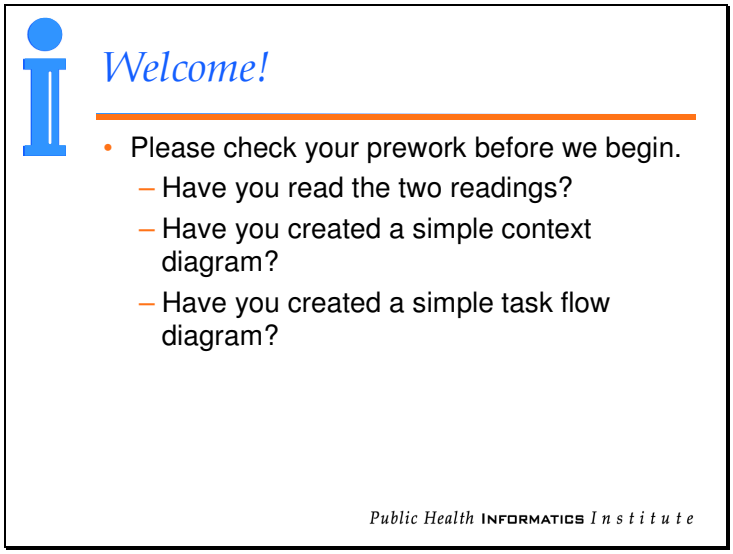
Preparation

- Prepare three flipcharts. They should mimic the charts on pages 4 to 6 of the Participant's Guide.
- Optional – use PowerPoint Slides instead of flipcharts

Introduction (15 min.)

Slide 1
Handout: Agenda

1. As participants are entering the training room, refer them to slide 1, *Welcome,* and ask them to check their prework. (Note: This will also allow them to finish the prework before class if they have not already done so.) Provide a handout containing the day's agenda.

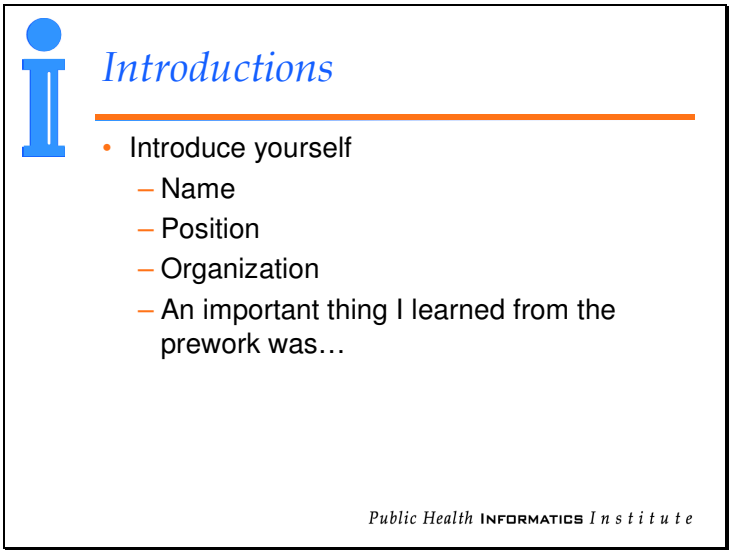


Slide 2

2. Show slide 2, *BPA Basics.* Explain that this is a workshop that will get the Work Group ready to complete the first phase of the Institute Requirements Development Methodology, Business Process Analysis.

Slide 3

3. Show slide 3, *Introductions.*



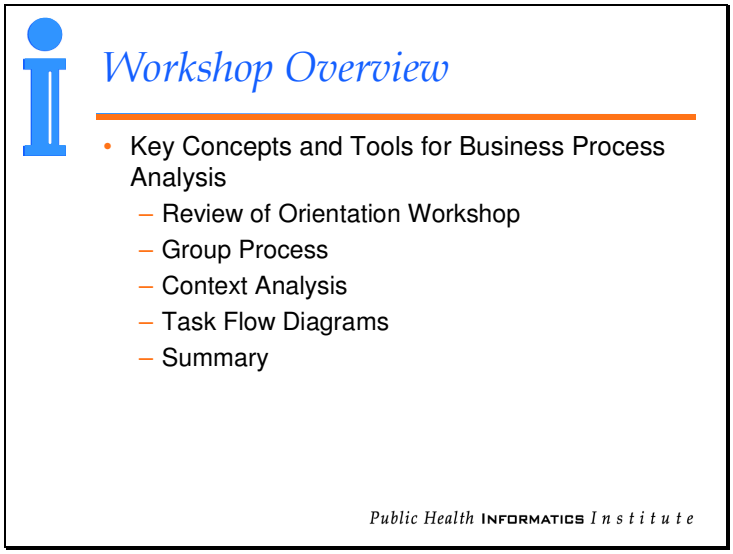
Flipchart: Key Points from Prework

4. Ask each participant to introduce themselves using the format on the slide. As the complete the sentence, "An important thing I learned from the prework was…" add their thoughts to a flipchart labeled "Key Points from Prework."

5. Transition: We'll get back to the prework information in a few minutes, but first, I'm going to give an overview of this workshop.

Slide 4

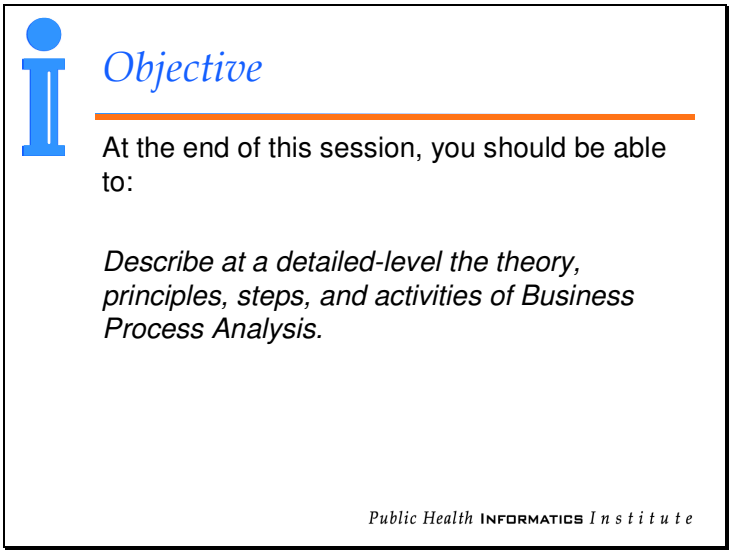
6. Show slide 4, *Workshop Overview* and refer participants to their agenda handout. Explain:



- In this workshop, we're going to first review key points from your orientation workshop.
- Then, we'll briefly discuss how we will work together during Business Process Analysis.
- Next, we'll explore the two analysis tools you learned about in the prework.
- Finally, we'll summarize the workshop.

Slide 5

7. Show slide 5, *Objectives.* Explain:

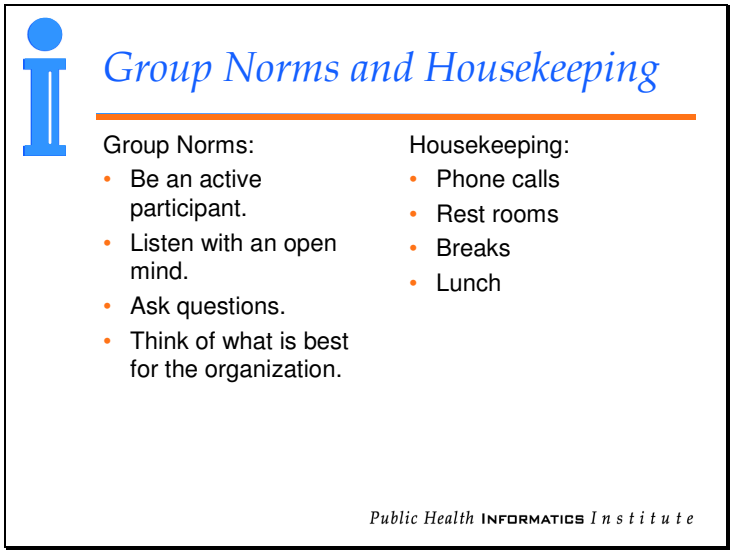


   - By the time we complete this workshop, you will be ready to efficiently begin the work of Business Process Analysis, with me as your facilitator.

8. Present: For your reference, the agenda and objectives are presented on page 3 of your Participant's Guide.

Slide 6
Flipchart

9. Show slide 6, *Group Norms and Housekeeping.* Ask participants if they would like to add to or change the group norms. Record any needed changes on a flipchart. Then, ask participants to agree to these norms. (They are the same ones as were used in the orientation workshop.)



10. Go over housekeeping rules (phone, breaks, etc.)

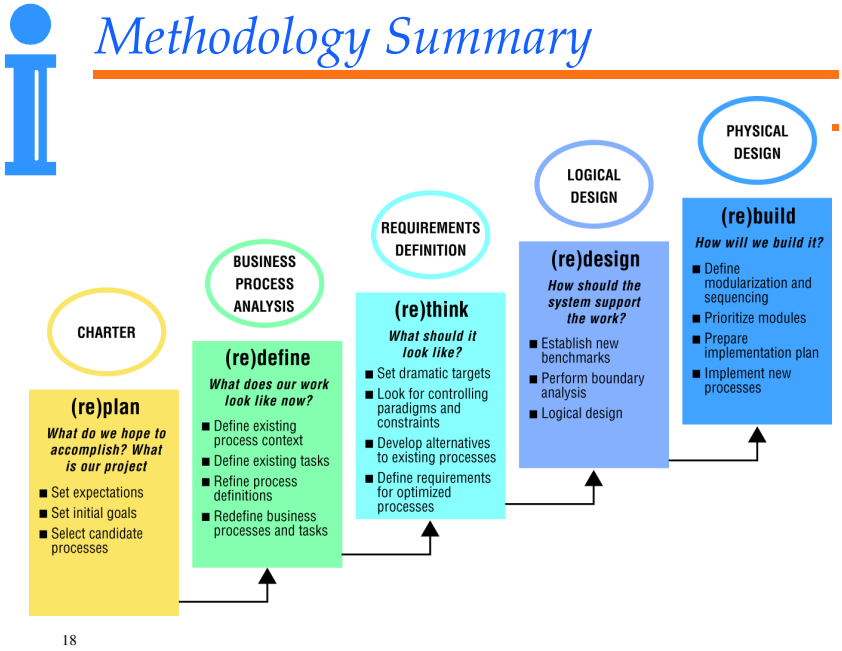
11. Ask: What questions can I answer about today's agenda and objectives before we continue?

Review of Orientation Workshop (50 min.)

1. Present: Let's start with a review of our previous workshop.
2. Show slide 7, *Components needed for Success:* Become familiar with the information provided for you on the notes section of this slide and present key points.

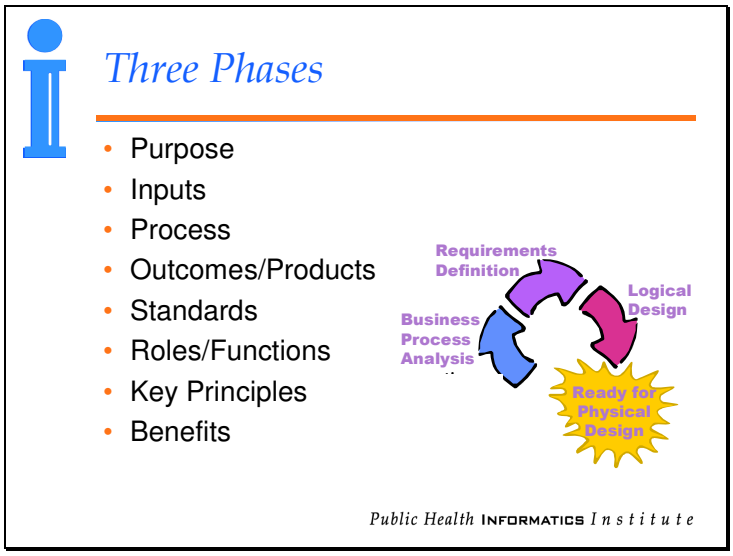
Slide 7, 8

3. Show slide 8, *Methodology Summary.* Become familiar with the information provided for you on the notes section of this slide and present key points.



Slide 9

4. Show Slide 9, *Three Phases*. Present: The Institute works collaboratively within the three middle phases. Each phase has the same components listed on this slide.



Slide 10

5. Show Slide 10, *Business Process Analysis*. Present: We will review the components of the Business Process Analysis phase.

PG-4 to 6

6. Refer participants to the worksheets on pages 4 – 6 in the Participant's Guide.

Slides 11-20

7. Present slides 11-20, allowing participants to take notes as desired.

Slide 21 or 22

Context Analysis (60 min.)

1. Show slide 21, if Pre-work 1 was assigned ahead of time.
2. Show slide 22 if not.

The following script assumes students have read pre-work 1 already. Use it as a guide to step through the handout together.

1. Present: Business Process Analysis is a progressive approach, working from the more general to the more specific. The initial, more general work can be accomplished by developing an overall, general understanding of the *context* in which the specific system result will be applied. This may be accomplished through the use of context diagrams, also known as entity diagrams.

Flipchart

2. Present: You read about context analysis and context diagrams in prework reading 1. Ask: What questions do you have from this prework reading.

   Facilitator's Note: *Record participants' questions on a flipchart and answer each as is appropriate within the discussion and activities that follow.*

   Facilitator's Note: *The questions that follow review the information in the prework.*

3. Ask: What is the purpose of context analysis?

   - Ideal starting point in project definition
   - Helps define organizational entities involved
   - Provides a broad scope to guide further, more detailed task flow analysis
   - To help define and evaluate objectives of the business function
   - Set the pattern for information gathering

4. Ask: What is a context diagram?

   - A non-technical graphical tool for recording context information.
   - It consists of the following elements: (1) entity—a person or group of people (e.g., accounts payable clerk or accounts payable department) who performs one or more tasks involved in a process. (2) Transaction: Information exchanges between entities.
   - Entities are represented by ovals and transactions are represented by arrows.
   - A context diagram may involve all the transactions of a single user of a system or of multiple users. Usually, single-user diagrams are attempted first (for ease), but combined user diagrams are needed to get a good look at an entire process.

5. Ask: Does the context diagram focus on specific, individual work tasks or on the general environment of the work process?

   - Focuses on general environment rather than specific, individual work tasks; however, each transaction shown is triggered and received by a specific work task.

6. Ask: Who (which entities) should be included in the context diagrams?

   - Any—internal or external—who perform a transaction that is critical to reaching the end objective of the process
   - Diagram is used to discuss *why* interactions among entities occur—what is the desired outcome or result? (If it is carried out for no apparent reason, then it is difficult to support its continued existence. If it is supporting some purpose or objective, then our interest turns to *how* the purpose or objective is achieved.

7. Ask: What are some of the standards or criteria used in developing context diagrams? How do we know if we're on the right track?

   - Each transaction should trigger an action within the given receiving entity that generates an outgoing transaction, or directly satisfies an overall objective of the environment.
   - Any external entity displayed must have at least one transaction with an internal entity.
   - Normally each entity will both receive and send transactions.
   - Should be able to track "chains" of related transactions through the environment.

8. Present:

   - Context diagrams can be thought of as maps describing the important features of areas. It need not be pretty, and more than likely it will not be correct the first time. Mainly, it is intended to aid the business analyst and Work Group members in determining the scope of the system and the important relationships. Once a general layout is determined, other, more specific tools will be used to aid in the detailed description of a particular system.
   - Context diagrams providing a jumping-off point for developing the more detailed task flow diagrams.

Pre-work 1

9. Transition: Let's look at the context diagrams that you developed as part of prework. (Ask participants to take out their prework assignments.). or Present group activity(Slide 23)

10. Ask one volunteer to give a general description of the process they mapped. The person should not provide much detail. For example, a brief description of the context diagram in the prework might be, "Getting an estimate on car repair work."

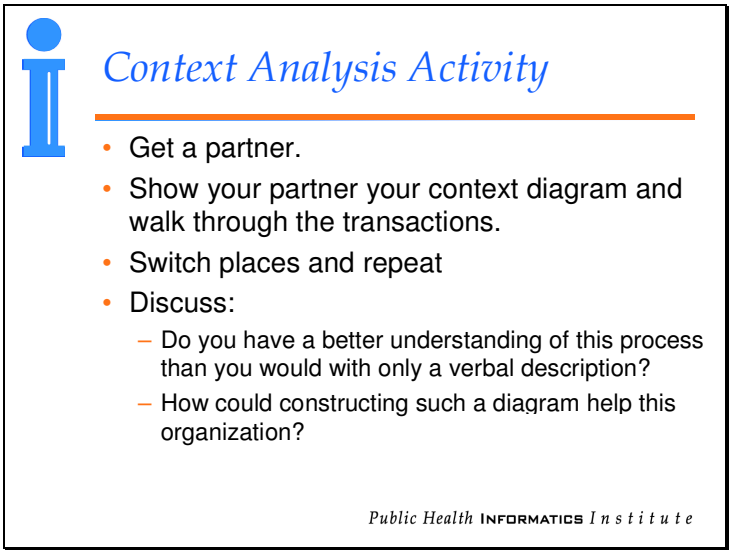
    Facilitator's Note: *You might want to pre-select a suitable diagram by informally reviewing prework before class (as participants begin settling into their seats) and choose one that will be easy for the whole class to relate to.*

11. Once you have a general idea of the process in mind, model the context diagram process by asking the volunteer a series of questions and producing the context diagram "on the fly" on a flipchart. You should not spend more than five to ten minutes on this demonstration.

12. Transition: This demonstration showed how someone can ask questions and use graphic tools to interview an expert and develop a context diagram.

Slide 23

13. Show slide 21 or 23, *Context Analysis Activity.* Read the directions on the slide.



14. Assist participants in forming groups.

15. Allow about 15 minutes for the activity.

Slide 24

16. Debrief discussion: What value do you see in completing a context analysis for our current project?

17. Transition: As you learned in your prework readings, constructing a context diagram is only the first level of detail. Let's move on to task flow analysis, which gets down to the deeper level that we need in order to complete Requirements Definition.

Slide 25

Task Flow Diagrams (60 min.)

1. Present:

   - In context analysis, we map out the *environment* in which tasks occur, showing all the entities in a process and the transactions among them (see prework reading 1). However, when creating context diagrams, we do not consider the activities that occur *within* each entity. Task flow diagrams are a tool for us to portray these activities, or tasks.

Flipchart

2. Present: You read about functional analysis and task flow diagrams in prework reading 2. Ask: What questions do you have from this prework reading.

   Facilitator's Note: *Record participants' questions on a flipchart and answer each as is appropriate within the discussion and activities that follow.*

   Facilitator's Note: *The questions that follow review the information in the prework.*

Pre-work 2

3. Ask: What is the purpose of task flow analysis?

   - Task flow diagrams proceed from, and are more detailed than, context diagrams. Key tasks—those that are most important to identified requirements—are described in more detail in task flow diagrams.
   - Helps further define requirements
   - Helps define activities that occur within the organizational entities in the context diagram
   - To help define and evaluate objectives of the business function

4. Ask: What is a task flow diagram?

   - Input, task, output/results
   - A task is an activity that can be performed by an individual or group without interruption once the action has begun. (Like the activities that take place to get something from an in box to an out box on someone's desk)
   - Flowchart form that shows, from left to right or from top to bottom, the sequence of activities
   - Standard flowcharting tools are used—rectangles, arrows, diamonds for decision points, etc.
   - Used for discrete tasks—those which can be performed by an individual or group without interruption once the task has started
   - Generally the achievement of the overall objective is reflected in the far right result(s
   - Inputs are either new data or information appearing in the environment for the first time rather than having been produced as a result from another transaction in the environment.

5. Ask: Does the task flow diagram focus on specific, individual work tasks or on the general environment of the work process?

   - Focuses on specific, individual work tasks

6. Ask: What are some of the standards or criteria used in developing task flow diagrams? How do we know if we're on the right track?

   - To create task flow diagrams, we start by creating a diagram that is basically a repeat of the information in the context diagram, except in format—the format should be that of a flowchart, as we did when converting the context diagram to an *overall* task flow diagram.
   - The results for one task generally serve as the input for another task or tasks, unless the final process objective has been reached.
   - At the end of the mapping process, all transactions should appear at least once on the flow diagram.
   - Ultimately, any separate diagrams should tie together when the analysis is completed.

Pre-work 2

7. Transition: Let's look at the task flow diagrams that you developed as part of prework. (Ask participants to take out their prework assignments.) Alternately – assign a task flow assignment

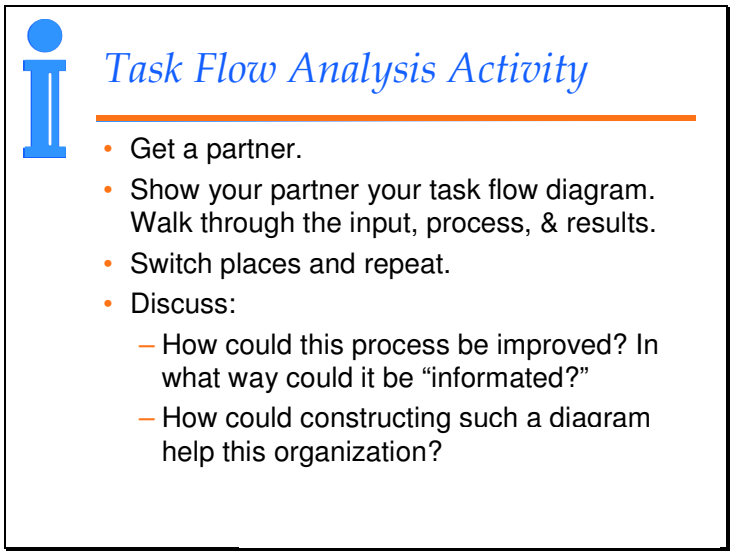
8. Ask one volunteer (the same as the one who earlier volunteered their context analysis to tell the name of the task they flowcharted.

9. Model the task flow diagramming process by asking the volunteer a series of questions and producing the task flow diagram "on the fly" on a flipchart. You should not spend more than five to ten minutes on this demonstration.

10. Transition: This demonstration showed how someone can ask questions and use graphic tools to interview an expert and develop a task flow diagram, based on the general knowledge gained during context analysis.

Slide 26

11. Show slide 26, *Task Flow Analysis Activity.* Read the directions on the slide.



12. Assist participants in forming pairs.

13. Allow about 15 minutes for the activity.

14. Debrief discussion: What value do you see in completing a context analysis for our current project?

15. Transition: Once we have completed the context analysis and task flow analysis, including any suggested enhancements, for all the processes under study, we have finished Business Process Analysis and are ready to proceed to Requirements Definition.

Slides 27-30

16. Emphasize: The difference between Business Process Analysis and the other two phases is that the emphasis is on business processes—what the users do—rather than what the system has to do.

17. Transition: Let's summarize what we've learned here. Show slides 27 - 30

18. Thank participants for their participation and commitment to the project.

Sample Answers for Flipchart Activity

Business Process Analysis

Purpose

To define boundary of project in relation to business work tasks it's going to support.

Inputs

- Charter (including how success will be measured)
- Completion of kickoff meeting
- *Work Group*: Group of people who collectively can describe the business processes and systems
- People from different organizations within the public health area to be discussed

Materials and other resources:

- Visuals (e.g., PowerPoint)
- Flipcharts and markers
- Project manager and note taker
- Jigsaw puzzles
- Participant workbooks
- Handouts
- Annotated bibliography
- Case stories

Facilitator preparation

- Read charter.
- Study project management plan.
- Study communication plan.
- Create/customize a presentation to lay the groundwork with the Work Group.
- Participate in kickoff meeting (present overview of work and how it will get done)
- Get basic familiarity with client organization(s) and their goals and culture.
- Get basic familiarity with current IT systems in the relevant marketplace.

Process Overview

All people identified above meet for a series of workshops to identify business processes. Business analyst formalizes the work and gets review and approval from Work Group prior to sending it to Sponsorship and Management Team. Business analysts and others from the Work Group may choose to conduct site visits to validate the work of the Work Group and identify potential opportunities for streamlining business processes.

The business process analysis is initially drafted in one or more two to three day sessions with the Work Group. The entire phase (Work Groups, review, revision/refinements, and approval) may take two to three months.

Process

Step 1: Set the Stage. Business analysts must be able to build an understanding among Work Group members of the process and concepts involved in Business Process Analysis so the participants are willing and able to participate in an efficient manner. This will be done by:

- Clearly communicating the project plan, scope, methodology, and principles. This information is a reinforcement of the kickoff.
- Describing the purpose and goal of business process analysis.
- Describing the process of business process analysis, including providing sample products.
- Making a case for "logical design before physical design," and explaining the relationship between business processes and information systems.
- Defining terms: business process analysis, requirements definition, logical design, entity, context diagrams, task, task flow, business process, business rules (if→then).
- Relating the importance of the project to the participants' own needs and goals.

Step 2: Begin to generate data about business processes. The business analyst asks one or more prompting questions, such as:

- What do you do and what does that look like?
- Who is involved in this process? How do they relate to each other?
- What activity takes place based on this transaction?

As participants begin to describe their processes, the business analyst begins to map them out. In this process, the business analyst may create:

- Context diagrams to show entity relationships and transactions
- Task flow diagrams (process flow charts) to tease out tasks
- Task lists
- Lists of business processes
- Business process diagrams showing relationships among tasks

Note that this process is very fluid. The group may go into great detail on one process, or they may jump to another process. The business analyst must be able to keep a lot of balls in the air while neatly organizing the group's work on flipcharts. At times, the business analyst may ask the group to set aside a particular effort if they get bogged down. The analyst also has to be able to spot entities, business processes, tasks, inputs, and outputs and label them appropriately so that the group is able to visually see how their business processes are organized.

This step continues until all business processes have been identified, each one has a context diagram and a description of inputs and outputs, and all tasks are identified. Additional data that may be captured during this session includes:

- Business rules
- Task descriptions
- Suggestions for process improvements

This may be accomplished during one two- to three-day session, or an additional session may be needed.

Step 3: Document and validate the work. All work completed during the Work Group sessions should be documented in both narrative and graphic form. It may be validated through optional site visits, or it may be sufficient to have review and approval by appropriate stakeholders identified in the project charter.

Outcomes/ products

- Documentation of business processes
- Work Group participants will be able to take back to their organizations suggestions for improving current business processes
- Learning through collaboration
- Benchmarking of best practices

Standards

- All stakeholders reach consensus that critical business processes and tasks and relationships are identified.
- There is enough information to proceed to Requirements Definition and Logical Design with minimal revision to Business Process Analysis.
- Once the two standards above are reached, this phase is completed. At some point there will come a time when the incremental effort exceeds the incremental gain; that is, even though the product might not be "perfect," it is better to move on than to get bogged down in details that will work themselves out in Requirements Definition and Logical Design.

Roles/functions

- Project manager: Build and maintain project management plan; actively manage project; serve as key communication link among project participants
- Communication manager: Create communication plan and communications products (e.g., fact sheets, articles, press releases)
- Business analyst: Facilitate development of context diagrams, task lists/descriptions, and business process diagram
- Subject matter experts—a blend of 5-10 experienced, knowledgeable people with collective program and IT knowledge: Identify current processes and work flows
- Sponsors for client organization: Help identify Work Group members and other parties identified in the charter; actively support project by providing needed endorsement and resources

Key communication links

- Make sure that resource needs, responsibilities, and authorities are clearly communicated to all parties.
- Make sure that all participants understand the entities, transactions, and tasks involved in the effort.
- Make sure participants have the chance to share information about current processes and to identify optimal processes.
- Communicate process and results to all stakeholders, as identified in charter.
- Reach consensus on products before beginning requirements definitions.

Requirements Definition

Purpose

To define what the system needs to do in order to support business processes. Requirements Definition answers the question: "How would you see information systems supporting (task X)?"

Inputs

Documented business processes

Process Overview

In this phase, the Work Group takes the documented business processes and identifies the system requirements that are needed in order to support each of the business processes identified. This is accomplished through a series of Work Group meetings.

Process

- Meet with Work Group and identify system requirements and sample screen layouts and navigation for each process. (This may require several meetings.)
- How were requirements generated? The Work Group should describe—for groups of tasks and process—what they do now and how they would like to do it.
- (Optional) Validate work with site visits.
- As needed, prioritize system requirements for phased approaches.
- Get approval and sign off as indicated in charter.

Outcomes/ products

- System requirements, organized by business processes, as well as general requirements that apply across multiple business processes.
- Screen schematics and suggestions for user interfaces and navigation
- Ability to make a buy/build decision based on comparing requirements to features of existing products
- Raw material for RFP
- Ability to evaluate vendor capability and interest for either off-the-shelf or custom-built solutions
- Ability for individual organizations to prioritize requirements; ability to determine logical implementation phases based on priorities.

Standards

- IT systems are described in enough detail so that all relevant business processes are supported with minimal data entry ("capture once; use many times").
- Systems requirements should be described in a way that is independent of technology.
- Requirements should be specific enough so that participants understand the requirements of a system that will support their business processes.

Roles/functions

- Project manager: Build and maintain project management plan; actively manage project; serve as key communication link among project participants
- Communication manager: Create communication plan and communications products (e.g., fact sheets, articles, press releases)
- Business analyst: Facilitate development of requirements and screen schematics and navigation
- Subject matter experts—a blend of 5-10 experienced, knowledgeable people with collective program and IT knowledge: Identify requirements and user needs for screen schematics and navigation
- Sponsors for client organization: Help identify Work Group members and other parties identified in the charter; actively support project by providing needed endorsement and resources

Key communication links

- Make sure that resource needs, responsibilities, and authorities are clearly communicated to all parties.
- Make sure that all participants understand the uses of requirements and screen schematics and navigation.
- Communicate process and results with all stakeholders, as identified in charter.
- Reach consensus on products before beginning Logical Design phase(if needed).

Logical Design

Purpose

To define (in writing and graphically) the database requirements for the system; to describe the database structure. This is the final step in the process prior to physical design, and the products provide guidelines from which the programmer can work.

Inputs

Completion of requirements definition

Process Overview

In this phase, the business analyst, assisted by the Work Group, develops Warnier diagrams (logical data structures) that programmers can use to build the physical data architecture. The business analyst may facilitate the process, or may teach Work Group members how to do it so the work can be divided.

Process

- Work independently and/or with Work Group to map out logical data structure.
- Get approval and sign off as indicated in charter.

Outcomes/ products

- Logical data structures, organized by processes
- Input for programming
- Raw material for RFP that tells vendors the exact requirements and database structures needed to meet these requirements.
- Ability to evaluate vendor capability for custom-built solutions
- Higher degree of interoperability

Roles/functions

- Project manager: Build and maintain project management plan; actively manage project; serve as key communication link among project participants
- Communication manager: Create communication plan and communications products (e.g., fact sheets, articles, press releases)
- Business analyst: The business analyst may develop Warnier diagrams independently with input and review from subject matter experts, or the analyst may teach the Work Group how to develop them and then either facilitate a collaborative process or independent work by experts.
- Subject matter experts: Assist business analysts
- Sponsors for client organization: Help identify Work Group members and other parties identified in the charter; actively support project by providing needed human resources

Note: A draft of the logical design may be completed by the business analyst and Work Group working together, business analyst working alone, one or more Work Group participants working alone after instruction from business analyst, or a combination of these three approaches.

Key communication links

The logical design may also be used in creating the proposed database design. The logical design will ensure a higher degree of interoperability.

- Make sure that resource needs, responsibilities, and authorities are clearly communicated to all parties.
- Communicate process and results to all stakeholders, as identified in charter.